

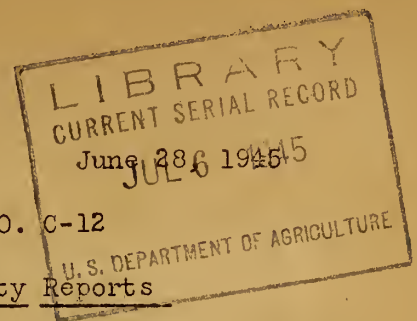
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WAR FOOD ADMINISTRATION  
Office of Marketing Services  
Washington 25, D.C.

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COTTON AND FIBER BRANCH MEMORANDUM NO. C-12

Adjusting Statistical Samples for Quality Reports

Cotton quality reports issued semi-monthly during the cotton season have been based on as nearly 10 percent of the cotton ginned in each district or State as could be obtained. Experience has shown that it is not possible to maintain a sample of exactly 10 percent for each ginning period and district. Partially to remedy any inaccuracies resulting from variations in the proportion of ginnings sampled the following procedure will be used in the Southeastern, South Central, and Southwestern Areas during 1945-46:

(1) Each of the three Area Offices concerned will be furnished, by wire, figures on ginnings, for districts and States by the Statistical and Quality Improvement Division as soon as possible after ginning figures by counties are released by the Bureau of the Census.

(2) Area Offices receiving these figures on ginnings will adjust the sample received from each district or State during the period to which the figures relate, by raising or lowering the number of samples for each quality by the percentage that the total actual sample received is above or below 10 percent of ginnings.

Example (a)

Ginnings for district (Census)	100,000 bales
Actual statistical sample	12,000 samples
Desired statistical sample	10,000 samples
$10,000 \div 12,000 = .83333$	
Good Middling in statistical sample	10 samples
1" in statistical sample	5151 samples
$10 \times .83333 = 8$	
$5151 \times .83333 = 4292$	
Adjusted statistical sample for Good Middling	8 samples
Adjusted statistical sample for 1"	4292 samples

Example (b)

Ginning for district (Census)	200,000 bales
Actual statistical sample	18,150 samples
Desired statistical sample	20,000 samples
$20,000 \div 18,150 = 1.101928$	
Strict Low Middling in statistical sample	5,453 samples
7/8" in statistical sample	352 samples
$5,453 \times 1.101928 = 6,009$	
$352 \times 1.101928 = 388$	
Adjusted statistical sample for Strict Low Middling	6,009 samples
Adjusted statistical sample for 7/8"	388 samples

(3) The samples used in the first report for the season will be raised or lowered on this basis and the adjusted statistical samples included in the cumulative figures for the second report. This procedure will be followed for each successive report. Thus, the cumulative estimates will be corrected for all ginning periods except the one currently reported.

(4) As soon as the statistical samples have been adjusted for all States in the area, the adjusted sample data (non-cumulative) will be sent by air mail to the Statistical and Quality Improvement Division in exactly the same detail, (not in telegraphic code) as the actual statistical sample data for each State sent to Washington by wire semi-monthly. This will permit adjustments in cumulative figures by States in the report on the total United States crop. The adjusted statistical sample data will be sent by wire in the usual code if necessary, to reach Washington in time for the report in which it is to be used.

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